



STATE OF WASHINGTON  
DEPARTMENT OF ECOLOGY

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C. Miller  
AUG 11 1999

DEPARTMENT OF  
PUBLIC WORKS ADMINISTRATION

August 2, 1999

Brent Mahan  
U.S. Army Corps of Engineers  
P. O. Box 3755  
Seattle, WA 98124-2255

Dear Mr. Mahan:

RE: Skagit River Flood Damage Reduction Feasibility Study - Concerns with Study  
Alternatives that may Impact the Padilla Bay National Estuarine Research Reserve

The U.S. Army Corps of Engineers and Skagit County are undertaking a feasibility study on long-term damage reduction strategies for the Skagit River. Although Ecology supports this approach, we are concerned about one of the options being considered. This option, the proposed bypass that would divert excess flows into a conveyance channel entering Padilla Bay, could have significant impacts on the Padilla Bay National Estuarine Reserve (PBNERR). I am writing this letter to raise these concerns and request that this alternative be eliminated from further consideration.

The by-pass option being considered would divert all or most of the flow exceeding current channel capacity into Padilla Bay through a conveyance channel. This alternative poses policy and legal concerns for Ecology and the National Oceanic and Atmospheric Administration (NOAA) because it can have dramatic impacts to the resources of the Padilla Bay National Estuarine Reserve (PBNERR) and to species listed as threatened pursuant to the Endangered Species Act.

The PBNERR was established in 1980 as a federal/state partnership to promote research and education under section 315 of the Federal Coastal Zone Management Act (CZMA). Section 315 establishes the National Estuarine Research Reserve System as a network of protected areas designated to help improve the health of the nation's estuaries and coastal habitat by developing and providing information that promotes informed resource management. Section 315 requires that, in order to designate a reserve, the Secretary must find that the laws of the state in which the site is located provide long-term protection for reserve resources to ensure a stable environment for research, long term environmental monitoring, and education. Once designated, the reserve must operate in



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accordance with the CZMA, the NERR system regulations, and with NOAA-approved management plans.

The management plan for the PBNERR, which was approved by the State and NOAA in 1984 notes that the following three major requirements will be met to ensure the integrity of the estuarine system:

- Maintain sufficient quantities of water inflow. This is comprised of overland drainage, mainly from agriculture lands and local sloughs. Inflows should occur at appropriate seasonal and annual levels to maintain the existing estuarine system.
- Maintain water quality by prevention of significant degradation of reserve waters.
- Prevention of significant alterations. This includes major dredging, filling, mineral extraction, wastewater discharge or disposal, or other uses suggested for the reserve which would significantly alter the hydrographic patterns, ecological productivity or surface area of the bay.

The proposed by-pass alternative would jeopardize the integrity of the PNERR ecosystem by altering all three of these major requirements.

The potential alterations could significantly affect one of the most extensive eelgrass beds on the west coast of the United States (over 7,000 acres). These eelgrass beds provide critical habitat for juvenile salmonids, other fish, crabs (particularly Dungeness crab), and migratory waterfowl and shorebirds. The normal flow of the Skagit River has been contained by low flood dikes, which for decades have directed water south into Skagit Bay. The by-pass alternative would alter the hydrology of the PBNERR in a flood event, directing Skagit River water into Padilla Bay, potentially contributing large sediment loads into the bay. Sediment loading in estuarine systems has been shown to degrade the integrity of eelgrass beds due to increased turbidity. The effects on eelgrass beds continue long after the flood event through re-suspension of the added sediment.

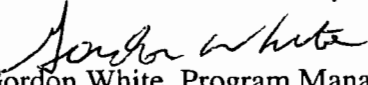
If eelgrass beds are degraded, the species that rely on the eelgrasses either directly or indirectly will be affected. Juvenile Chinook salmon (threatened) utilizes eelgrass beds and their presence in Padilla Bay has been documented in research studies. Similarly, Chum salmon and Dungeness crab use of the eelgrass beds in Padilla bay has been documented in a series of studies on fish and epifauna in eelgrass beds of Padilla Bay.

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The eelgrass beds also attract large flocks of waterfowl to Padilla Bay, particularly during winter and during spring and fall migration. The large numbers of waterfowl in Padilla Bay, in turn, attract their predators including large concentrations of wintering and nesting Peregrine Falcons (threatened) and Bald Eagles.

Given potential resource threats and environmental impacts to the resources of PBNERR, Ecology is very concerned about any alternative that changes the existing hydrographic patterns of the PBNERR. It would also violate the agreement between Ecology and NOAA outlined in the PBNERR's approved management plan. For these reasons outlined above, any proposal that would negatively impact the integrity of the PBNERR would not be acceptable. If you have any questions, please contact Dave Burdick at (360) 407-6996 or Tim D'Acci at (360) 407-6796.

Sincerely,

  
Gordon White, Program Manager  
Department of Ecology

cc: ✓ Sky Miller, Skagit County  
Dave Burdick, Department of Ecology  
Tim D'Acci, Department of Ecology